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## In the claims:

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1. (Currently amended) A method of treating a liquid or a slurmy of a liquid with an ultrasonic energy comprising: providing a movable endless member (214) for treatment of a slurry or liquid, being permeable to the liquid or a liquid portion of the slurry (204), and an ultrasonic transducer (236) disposed a distance (d4) from the member (214), a movable endless member (230) disposed above the member (214) and an ultrasonic transducer (234) disposed at a distance (d3) from the member (230); moving the endless members (214, 230); feeding the slurry (204) between the members (214, 230); and the gransducers (234, 236) generating pressure pulses through the members (230, 214) to form imploding bubbles (227) in the slur: y disposed between the members (214, 230), the bubbles (227) having a diameter (d5) that is greater than the distance (d3) between the transducer (234) and the member (230) and the distance (d4) between the transducer (236) and the member: (214) to prevent the bubbles (227) from being captured between the ransducer (234) and the member (230) and between the transducer (236) and the member (214). providing a first member being permeable to a medium, and a first vibrating device and the first member having a first gap formed therebetween, the first gap representing a first distance; a second member aligned with the first member and providing a

second distances.

second vibrating device, the second vibrating device and the
second member having a second gap formed therebetween, the
second gap representing a second distance;
feeding the medium between the first and second members; and
the first and second vibrating devices generating pulses
through the first and second members, respectively, to form
impleding bubbles in the medium disposed between the first and
second members, the bubbles having a critical diameter prior
to implesion that is greater than the first distance and the
second distance to prevent the bubbles from growing in the
first and second gaps to a size greater than the first and

- 2. (Currently amended) The method according to claim 1 wherein the method further comprises feeding the slurry (204) to a fermentation tank (248).
- 3. (Currently amended) The method according to claim 2

  wherein the method further comprises creating an anaerobic environment in the fermentation tank (248) prior to receiving the slurry (204).
- 4. (Currently amended) The method according to claim 1

  25 wherein the method further comprises gradually narrowing a

  third gap (233) between the first and second members until a

  fourth gap (235) is reached between the first and second

members (230, 214) and forming an angle (alpha) between the first member (214) and the second member (230) so that the first and second members (214, 230) are wedge-shaped.

- 5 5. (Currently amended) The method according to claim 3 wherein the method further comprises collecting protoplasm from collapsed bacteria and other colloidal substances from the ultrasonic treatment of the sludge slurry in the a drain water (240) bring it and bringing the protoplasm into a mixer (238) and mixing it the protoplasm with the ultrasound treated slurry falling down into the mixer (238) from the member (214).
- 6. (Currently amended) The method according to claim 5
  wherein the method further comprises removing air from the slurry from the mixer (238) prior to pumping the slurry to the fermentation tank (248).
- 7. (Currently amended) The method according to claim 2

  wherein the method further comprises circulating the slurry (250) from the fermentation tank (248) in a circulation conduit (262) and removing biogas from the slurry before pumping the slurry back into the fermentation tank.
- 8. (Currently amended) The method according to claim 1 wherein the method further comprises sending the slurry (250) in the fermentation tank back to the <u>first</u> member (214) and treating

the slurry (250) with ultrasound from the transducers (234, 236).

- 9. (Currently amended) The method according to claim 8

  5 wherein the method further comprises ultrasound treating the slurry (250) prior to sending the slurry (250) to the a press unit (270).
- 10. (Currently amended) A method of treating a medium with an 10 ultrasonic energy comprising: providing a first movable endless member (214) for treatment of a medium, and an a first ultrasonic transducer (236) disposed a first distance (d4) from the first member, a second movable endless member (230) disposed opposite to the first 15 member (214) and a second ultrasonic transducer (234) disposed at a second distance (d3) from the second member; moving the first and second endless members; feeding the medium between the first and second members; and the transducers generating pressure pulses through the first 20 and second members to form imploding bubbles in the medium disposed between the members, the bubbles having a diameter (d5) that is greater than the distance (d3) between the trangducer (234) and the second member (230) and the distance (d4) between the transducer (236) and the first member (214) 25 to prevent the bubbles from being captured between the transducer (234) and the second member (230) and between the transducer (236) and the first member (214) the bubbles having

a critical diameter prior to implosion that is greater than the first distance and the second distance to prevent the:

bubbles from growing to a size greater than the first and:

second distances.

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